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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,026	01/25/2005	Franca Leo	Q832282	7691

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EXAMINER	
VALENTI, ANDREA M	
ART UNIT	PAPER NUMBER
3643	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/507,026	LEO, FRANCA	
	Examiner	Art Unit	
	Andrea M. Valenti	3643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 February 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) *12* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 12 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claims cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

Claim 13, in the copy of claims filed on 24 January 2007 applicant left out claim 13 which was part of the original claim list. Did applicant cancel this claim? The claims must still be listed and indicated as canceled if this is the case.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,419,283 to Leo in view of U.S. Patent No. 6,178,922 to Denesuk and U.S. Patent Pub. No. US 6,926,916 to Day et al.

Regarding Claims 1, 2, and 3, Leo teaches a chewable toy for animals, which can be produced by the moulding into a desired configuration of a mixture comprising: 100 parts by weight of a degradable polymeric composition comprising a starchy material (Leo abstract line 5) and a degradable ethylene copolymer. Leo teaches the polymeric composition includes plasticizer in a quantity of between 10-40% by weight,

the plasticizer being selected from the group consisting of sucrose, maltose, fructose, and mixtures thereof (Leo Col. 1 line 49-54 and Col.1 line 35-36).

Leo teaches the addition of edible lubricants, vitamins, proteins, mineral salts, flavouring, therapeutic substances, dental care products, products that enhance attractiveness of the toy (Leo Col. 2 line 46-50 and Col. 1 line 55-61), but is silent on explicitly teaching from from 0.5 to 5 (or 1 to 3) parts by weight of garlic or derivatives thereof. However, Denesuk teaches that it is old and notoriously well-known to incorporate garlic additives to animal toys (Denesuk Col. 4 line 28-31 and Col. 15 line 19-21; claim 49, 50, 68). It would have been obvious to one of ordinary skill in the art to modify the teachings of Leo with the teachings of Denesuk at the time of the invention since the modification is merely the addition of a flavouring agent/a natural anti-microbial agent as taught by Denesuk. It would have been obvious to one of ordinary skill in the art to further modify the teachings of Leo through routine tests and experimentation to derive a desire ratio of garlic to optimize the composition since applicant has not established a criticality to this ratio.

Leo teaches the addition of edible lubricants of polyhydric alcohols (Leo Col. 1 line 55-57). Isomalt is a polyhydric alcohol, but Leo is silent on explicitly identifying isomalt. However, it would have been obvious to one of ordinary skill in the art to further modify the teachings of Leo at the time of the invention since the modification is merely an engineering design choice involving the selection of a known alternate polyhydric alcohol selected based on cost, availabity, and/or known tooth friendly properties such a preventing plaque and cavities.

It can further be interpreted from the perspective, that Leo teaches the addition of vitamins, proteins, mineral salts, flavouring, therapeutic substances, dental care products, products that enhance attractiveness of the toy (Leo Col. 2 line 46-50), but is silent on explicitly identifying isomalt. However, Day teaches that it is notoriously well-known that isomalt is known sweetening agent (Day Col. 8 line 8-14). It would have been obvious to one of ordinary skill in the art to further modify the teachings of Leo with the teachings of Day at the time of the invention since the modification is merely an engineering design choice involving the selection of a known flavouring ingredient to provide a sweet flavour to the toy. Furthermore, isomalt has known beneficial properties of preventing cavities, preventing plaque, has a dietary fiber effect on the gut. All of these beneficial properties are considered therapeutic, dental care, flavour additives as taught by Leo.

Leo as modified is silent on explicitly teaching 5 to 30 parts by weight isomalt. However, It would have been obvious to one of ordinary skill in the art to further modify the teachings of Leo through routine tests and experimentation to derive a desire ratio of isomalt to optimize the composition since applicant has not established a criticality to this ratio. Day teaches that the amount of sweetener will vary depending on the desired intensity of sweetness (Day Col. 8 line 17-25).

Regarding Claim 9, Leo as modified teaches the starchy material is selected from the group consisting of starch, hydrolyzed starch, starch dextrin and mixtures thereof (Leo Col. 1 line 28-29).

Regarding Claim 10, Leo as modified teaches in which the degradable ethylene copolymer is selected from the group consisting of polyethylene-acrylic acid, polyethylene-vinyl alcohol and mixtures thereof (Leo Col. 1 line 43).

Regarding Claim 11, Leo as modified teaches in which the ratio by weight between the ethylene copolymer and the starchy material is within the range between 1:6 and 2: 1 and, preferably, within the range between 1:6 and 1:1 (Leo Col. 1 line 47-48).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,419,283 to Leo in view of U.S. Patent No. 6,178,922 to Denesuk and U.S. Patent Pub. No. US 6,926,916 to Day et al. as applied to claim 1 above, and further in view of U.S. Patent No. 5,391,390 to Leo.

Regarding Claim 4, Leo '283 as modified teaches the addition of garlic and that the garlic *can be produced* by various methods, but is silent on explicitly teaching which the derivative of garlic is a powder which can be produced as a result of the formation of a suspension of garlic bulbs in water in a ratio by weight within the range between 1:2 and 1:5 and subsequent lyophilization of the suspension with a preliminary stage of cooling to -50C for from 4 to 8 hours followed by a heating stage with a duration of between 12 and 24 hours, to a temperature no greater than 50OC. However, Patent '390 to Leo teaches a known method of producing garlic powder (Leo '390 claim 1). It would have been obvious to one of ordinary skill in the art to further modify the teachings of Leo '283 with the teachings of Leo '390 at the time of the invention since

he modification is merely the an engineering design choice involving the selection of known garlic production method selected to prevent the offensive day-after effect as taught by Leo '390.

Claims 5, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,419,283 to Leo in view of U.S. Patent No. 6,178,922 to Denesuk and U.S. Patent Pub. No. US 6,926,916 to Day et al as applied to claim 1 above, and further in view of U.S. Patent No. 6,586,027 to Axelrod.

Regarding Claims 6 and 7, Leo as modified teaches edible lubricants, vitamins, proteins, mineral salts, flavouring, therapeutic substances, dental care products, products that enhance attractiveness of the toy (Leo Col. 2 line 46-50 and Col. 1 line 55-61), but is silent on explicitly teaching in which the mixture also comprises from 5 to 30, and preferably from 15 to 20, parts by weight of ground raw animal hide per 100 parts by weight of degradable polymeric composition; in which the mixture also comprises from 0.01 to 1 part by weight of hide aroma per 100 parts by weight of degradable polymeric composition. However, Axelrod teaches the combination of starch and polymers and rawhide in combination for forming a pet chew toy (Axelrod abstract; Col. 2 line 26-28). It would have been obvious to one of ordinary skill in the art to further modify the teachings of Leo with the teachings of Axelrod at the time of the invention since the modification is merely the addition of a flavouring agent to attract a pet's interest. It would have been obvious to one of ordinary skill through routine tests and

experimentation to derive the desired ratio of proportion of agents to optimize the system.

Regarding Claim 5, Leo as modified teaches the addition of edible lubricants, vitamins, proteins, mineral salts, flavouring, therapeutic substances, ***dental care*** products, products that enhance attractiveness of the toy (Leo Col. 2 line 46-50 and Col. 1 line 55-61), but is silent on explicitly teaching in which the mixture also comprises from 1 to 20, and preferably from 5 to 10, parts by weight of chestnut flour per 100 parts by weight of degradable polymeric composition. However, Axelrod teaches that chestnut is used as a known herbal addition to a pet chew toy (Axelrod Col. 3 line 67). It would have been obvious to one of ordinary skill in the art to further modify the teachings of Leo with the teachings of Axelrod at the time of the invention since the modification is merely the addition of a known flavouring agent to enhance an animals attention to the toy. It would have been obvious to one of ordinary skill through routine tests and experimentation to derive the desired ratio of proportion of agents to optimize the system.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,419,283 to Leo in view of U.S. Patent No. 6,178,922 to Denesuk and U.S. Patent Pub. No. US 6,926,916 to Day et al as applied to claim 1 above, and further in view of U.S. Patent No. 5,618,518 to Stookey.

Regarding Claim 8, Leo as modified teaches the addition of edible lubricants, vitamins, proteins, mineral salts, flavouring, therapeutic substances, ***dental care***

products, products that enhance attractiveness of the toy (Leo Col. 2 line 46-50 and Col. 1 line 55-61), but is silent on explicitly teaching the mixture also comprises from 0.5 to 3, and preferably from 1 to 2, parts by weight of sodium hexametaphosphate per 100 parts by weight of degradable polymeric composition. However, Stookey teaches an animal chew toy with a dental additive of sodium hexametaphosphate (Stookey Abstract). It would have been obvious to one of ordinary skill in the art to further modify the teachings of Leo with the teachings of Stookey at the time of the invention to prevent calculus as taught by Stookey. It would have been obvious to one of ordinary skill through routine tests and experimentation to derive the desired ratio of proportion of agents to optimize the system.

Response to Arguments

Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Examiner acknowledges applicant's request for an interview filed 26 February 2007. However, an interview regarding the currently claimed subject matter has already been conducted in December 2006. Examiner suggests that applicant contact the examiner upon review of this office action to set up an additional interview if still warranted, since an interview at this time would not serve to advance prosecution.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 5,098,730 (Claim 12) and Polyols Information Source, Isomalt www.polyol.org/fap/fap_isomalt.html [retrieved from internet 12 April

2007] 4 pages. (this article teaches the use of isomalt has been around since the 1980s and was discovered in the 1960s).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea M. Valenti whose telephone number is 571-272-6895. The examiner can normally be reached on 7:00am-5:30pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 571-272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andrea M. Valenti
Primary Examiner
Art Unit 3643

12 April 2007